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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,768	10/29/2003	Ryoichi Ochi	8022-1062	5283

466 7590 07/03/2006

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EXAMINER	
IQBAL, KHAWAR	

ART UNIT	PAPER NUMBER
2617	

DATE MAILED: 07/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/694,768	OCHI ET AL.	
	Examiner	Art Unit	
	Khawar Iqbal	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *03* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 May 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,14 and 15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,14 and 15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date .
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-3,14—15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson, JR. et al (20040147287) and further in view of Sole et al (6150987).

3. Regarding claim 1 Nelson, JR. et al teaches a wireless LAN access point comprising (figs. 1-3):

a directional antenna, an interference detector detecting interference effected by another wireless LAN access point on said directional antenna (para. # 00150019-0020, 0046); and

a direction adjusting mechanism adjusting a maximum gain direction of said directional antenna in response to said detected interference (para. # 00150019-0020, 0040,0046, 0051). Nelson, JR. et al does not explicitly state mechanically rotating directional antenna.

In an analogous art, Sole et al teaches mechanically rotating directional antenna (col. 2, lines 40-67, col. 5, lines 1-30). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Nelson, JR. et al by specifically adding feature mechanically rotating antenna in order

to enhance system performance to achieves optimal orientation of antenna with respect to other station antenna which improves reliability as taught by Sole at al.

Regarding claim 2 Nelson, JR. et al teaches further comprising a control unit determining an optimized direction in response to the detected interference, wherein said direction adjusting mechanism adjusts a maximum gain direction of the directional antenna to the optimized direction, and wherein said control unit determines said optimized direction such that said directional antenna is free from said interference effected by said other wireless LAN access point (para. # 00150019-0020,0040,0046, 0051).

Regarding claim 3 Nelson, JR. et al teaches wherein said interference detector detects a strength of said interference from said other wireless LAN access points, and wherein said controller unit determines said optimized direction in response to said detected strength of said interference (para. # 00150019-0020,0040,0046, 0051).

Regarding claim 14 Nelson, JR. et al teaches a method for operating a wireless LAN access point including a directional antenna, said method comprising (figs. 1-3): detecting interference effected on said directional antenna by another wireless LAN access point (para. # 00150019-0020,0040,0046, 0051); determining an optimized direction in response to said detected interference (para. # 00150019-0020,0040,0046, 0051); and adjusting a gain maximum direction to said optimized direction so that said directional antenna is free from said interference (para. # 00150019-0020,0040,0046, 0051). Nelson, JR. et al does not explicitly state mechanically rotating directional antenna.

In an analogous art, Sole et al teaches mechanically rotating directional antenna (col. 2, lines 40-67, col. 5, lines 1-30). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Nelson, JR. et al by specifically adding feature mechanically rotating antenna in order to enhance system performance to achieves optimal orientation of antenna with respect to other station antenna which improves reliability as taught by Sole at al.

Regarding claim 15 Nelson, JR. et al teaches a method for operating a wireless LAN access point including a directional antenna, said method comprising (fig. 1): detecting a strength of interference effected on said directional antenna by another wireless LAN access point (para. # 00150019-0020,0040,0046, 0051); determining an optimized direction in response to said detected strength of said interference (para. # 00150019-0020,0040,0046, 0051); and adjusting a gain maximum direction to said optimized direction (para. # 00150019-0020,0040,0046, 0051). Nelson, JR. et al does not explicitly state mechanically rotating directional antenna.

In an analogous art, Sole et al teaches mechanically rotating directional antenna (col. 2, lines 40-67, col. 5, lines 1-30). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Nelson, JR. et al by specifically adding feature mechanically rotating antenna in order to enhance system performance to achieves optimal orientation of antenna with respect to other station antenna which improves reliability as taught by Sole at al.

Response to Arguments

4. Applicant's arguments with respect to claims 1-3,14-15 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khawar Iqbal whose telephone number is 571-272-7909.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph H. Feild can be reached on (571) 272-4090. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Khawar Iqbal

JOSEPH FEILD
SUPERVISORY PATENT EXAMINER